

## 7.3 VISUAL RESOURCES

### 7.3.1 Affected Environment

The following discussion of visual resources is divided into two subject areas, KTA and Drum Road/KLOA. The ROI includes all areas within the line of sight of proposed activities or changes on KTA or Drum Road/ KLOA. The ROI, therefore, includes a wide corridor of land along the proposed route of Drum Road through KLOA, including views from adjacent roadways (Wilikina Drive, Kamananui Drive, and Kamehameha Highway), coastal and nearshore areas, and adjacent trails and forest preserve areas.

KTA and Drum Road/KLOA are within the geographic area addressed in the Ko'olau Loa and North Shore Sustainable Communities Plan areas of the General Plan for the City and County of Honolulu. Although the Ko'olau Loa Sustainable Communities Plan provides specific recommendations for KTA (City and County of Honolulu 1999, 3-7), the guidelines do not pertain to visual resource management. The plan does include guidelines for preserving scenic resources, defined as mountain and shoreline areas, natural drainages, parks, and golf courses (City and County of Honolulu 2002b, 3-1).

The North Shore Sustainable Communities Plan states that views of scenic resources, such as the Wai'anae and Ko'olau Mountain Ranges, as well as more gradual slopes, or pali, nearer to the coast, the coastline, the Pacific Ocean and views from public places, including major roadways, should be preserved. Developers should minimize the impact on these scenic resources, and interagency and private sector should be encouraged to participate and cooperate in creating, maintaining, and enhancing views and visual resources on the North Shore (City and County of Honolulu 2000a, 3-17).

### ***Landscape Character***

#### *Kahuku Training Area and Kawaihoa Training Area*

KTA and KLOA are adjacent to each other and are included in the Kawaihoa Forest Reserve. The southern portion of KLOA includes the 'Ewa Forest Reserve. The visual landscape of the area generally is characterized by panoramic views of the Pacific Ocean and the Ko'olau Mountain Range or coastal plain and pali. KTA and KLOA extend from a gently sloping coastal plain, into moderately sloping rougher bluffs, and finally into the steep irregular ridgelines of the Ko'olau Mountain Range. Valleys and pali separate the coastal areas from the upland portions of KTA and KLOA and dominate the foreground and middleground views from the coastal area. The Ko'olau Mountain Range is a background feature, although it is largely obscured along much of the coastal area by vegetation and topography.

Human-made features on KTA are limited to roads, antenna support structures and windmills, and a few structures dispersed throughout the area. Most of the structures on KTA are obscured by vegetation or topography; nevertheless, those that are visible contrast sharply with the natural elements of the visual field. Human-made features on KLOA include roads, trails, and the Pu'u Kapu landing zone.

Vegetation in the coastal plain and pali is a mixture of grasses, shrubs, and mature trees. Vegetation on the ridges in the background includes forest and woodland communities. Vegetation softens the edges of the topography in the area and, because of the viewing distance, the texture and color of vegetation on the ridges is more uniform in appearance. The surrounding area has a high degree of modification, particularly along the coast where there are numerous buildings, roads, fences, power lines and other infrastructure, and agricultural activities. The area in and around KTA and KLOA is considered to have high visual quality due to the panoramic views, the intactness of most views, and the integrated form of the natural features.

#### *Drum Road*

Drum Road is in KTA and along the western boundary of KLOA, an area generally characterized by the irregular form of the Koʻolau Mountain Range ridges and valleys with few human-made features. Vegetation ranges from grass and shrubs to mature trees. Variation in vegetation patterns and topography result in a coarser visual texture and a more varied and integrated visual setting. The views from the higher elevations are more enclosed due to the canopies of mature trees, although occasional panoramic views of the ocean, coastal plain, and surrounding mountains occur throughout this area. Due to the panoramic views, the lack of substantial modifications that break up the views, and the integrated form of the natural features, this area has a high visual quality.

Drum Road occupies the middleground or background of views from most surrounding areas such that much of the visual detail is lost. Most easterly and southeasterly views of the road are completely or occasionally obstructed by vegetative screening or topography.

#### ***Sensitive Views***

The Koʻolau Loa Sustainable Communities Plan has designated several panoramic views in the area of KTA, including the views inland (mauka) from the Kamehameha Highway along Mālaekahana Bay (south of Kahuku) (City and County of Honolulu 2002b, [Open Space Map]).

The North Shore Sustainable Communities Plan designates inland views from the Kamehameha Highway between Haleʻiwa and Waialeʻe as continuous scenic views, while easterly views toward KTA and Drum Road/ KLOA from the Kamehameha Highway, between the Poamoho Stream channel and Haleʻiwa, are designated as intermittent scenic views (City and County of Honolulu 2000a, 3-15). In addition, a large number of recreational areas along the north shore, including Waialeʻe Beach County Park, Pahipahiʻālua Beach, Kawela Bay Beach Park, the Turtle Bay and Kahuku golf courses, Puʻuhōnua O Mālaekahana Park, Mālaekahana State Recreation Area, and Laʻie Point County Park, are considered sensitive viewing areas.

As discussed in Section 7.2, Land Use, the Army permits only limited recreational uses on KTA. These uses are largely limited to weekends and holidays and times when the Army is not conducting maneuvers. These uses include hiking on the Kaunala Trail in the west central portion of KTA, hiking on the Pūpūkea Summit Trail, along the border of KTA and extending south along the KLOA and SBER border, hunting in the Kahuku Hunting Area in

training area A1, hunting in the Pūpūkea State Public Hunting Area in training area A3, and occasional bicycle and motocross races in training area A1.

### 7.3.2 Environmental Consequences

#### ***Summary of Impacts***

Projects proposed on KTA, including the new CACTF, a tactical vehicle wash facility, and antenna support structures, are generally screened by higher terrain or heavy vegetative cover. SBCT-related activities would not require significant changes in landform and vegetative cover. Taking into account the existing conditions at proposed SBCT-related project sites and the distance to off-post viewing areas, no significant impacts to visual resources would be associated with the Proposed Action on KTA. Potential impacts to visual resources are summarized in Table 7-9.

**Table 7-9**  
**Summary of Potential Visual Resources Impacts at KTA/KLOA**

Impact Issues	Proposed Action		Reduced Land Acquisition		No Action	
	KTA	KOLA	KTA	KOLA	KTA	KOLA
Impairment of view during the construction phase	⊗	○	⊗	○	○	○
Modification of existing view	⊗	⊗	⊗	⊗	○	○
Alteration of the landscape character	⊗	⊗	⊗	⊗	○	○
Consistency with visual resource policies	⊗	⊗	⊗	⊗	○	○
Impairment of view from visible fugitive dust	⊗	○	⊗	○	○	○
Alteration nighttime light and glare	⊗	○	⊗	○	○	○

In cases when there would be both beneficial and adverse impacts, both are shown on this table. Mitigation measures would only apply to adverse impacts.

#### **LEGEND:**

- |  |     |                     |
|--|-----|---------------------|
| ⊗ = Significant  | +   | = Beneficial impact |
| ⊗ = Significant but mitigable to less than significant | N/A | = Not applicable    |
| ⊗ = Less than significant                              |     |                     |
| ○ = No impact  |     |                     |

#### ***Proposed Action (Preferred Alternative)***

##### **Less than Significant Impacts**

**Modification of the existing view.** SBCT-related construction on KTA would be only partially visible along most of the north coastal area due to a bluff just inland of the Kamehameha Highway that obstructs views. Terrain to the northeast of KTA is slightly more open and permits partial views of KTA. The proposed FTI antenna on KTA would be visible but at such a distance from any sensitive view points that it would not be distinguishable. Neither the CACTF at the former Nike site nor the proposed location of the vehicle wash facility would be visible from outside KTA.

The CACTF and the proposed FTI antenna to be constructed at the former Nike Command Site would be visible from outside KTA but views would be partially visible from points along the Kamehameha Highway corridor beginning near Kuilima Point in the west and extending easterly to approximately Makahoa Point. This area includes the Turtle Bay Resort, the town of Kahuku and several beach and recreational areas along the northeast coast. The distance to the Nike Command Site from these points is such that little detail is discernable and views are frequently limited by heavy vegetation. Photo 7-1 depicts the view from Kamehameha Highway at the entrance to the Turtle Bay Resort.



Photo 7-1. View from entrance to Turtle Bay Resort looking south.

The view from this location is partly obstructed by plantings along the roadside, which is typical along much of the route between Hale'iwa to the west and this location. Although vegetation in the area varies, trees are the predominant vegetation immediately inland of the highway. The coastal bluffs are clearly visible in the middleground of this view. These bluffs are the dominant landform feature and extend along the entire route of the highway, obstructing portions of the inland view. The slopes of the Ko'olau Mountain Range are visible in the background from this viewpoint, although they are at such a distance that little detail is discernable. From this vantage point, the SBCT-related project sites are not visible.

The view along the northeast coastal region is more open, although still partly obstructed by terrain and vegetation. Photo 7-2 depicts the view from Kamehameha Highway at Charlie Road, the primary entrance to KTA. The coastal bluffs are clearly visible in the foreground and middle ground. This view clearly depicts the visual obstruction associated with these landforms. The slopes of the Ko'olau Mountain Range, as seen in the previous Photo 7-1, are not visible from this vantage point. From this vantage point, the SBCT-related project sites are not visible.

Implementing the Proposed Action would result in a change in the type and an increase in the number of vehicles employed by the 2<sup>nd</sup> Brigade. The Stryker vehicle would allow training units to drive off-road and over steeper terrain than current vehicles. Nevertheless, as described above, terrain and vegetation in the area would obstruct views from off-post of most roads, including Drum Road, used in training or access to KTA. As a result of the terrain and vegetation on and near KTA, SBCT-related training activities, and construction of the tactical vehicle wash and CACTF would not be expected to alter the landscape character or modify any existing views.



Photo 7-2. View from intersection of Kamehameha Highway and Charlie Road (primary entrance to KTA) looking southwest.

None of the SBCT project sites are visible from the Kaunala and Pūpūkea Summit recreational trails, which lie to the south and west in the Kahuku Forest Reserve.

Continued and expanded use of Drum Road would add inconsistent visual elements to the area but this impact would be less than significant due to the intermittent and transient nature of the use, and the fact that most views of Drum Road would be obscured by vegetation and terrain. This impact would also be partially offset by the beneficial impact on views from major highways and other nearby visually sensitive areas, such as coastal parks and beaches, that would occur as a result of the reduction in highly visible military convoys on public roadways.

Alteration of landscape character. The Proposed Action on KTA would introduce new structures and additional training maneuvers that would be incompatible with the surrounding natural features. Because these new features would largely be obscured by topography and vegetation and would be at such distances from sensitive viewing locations that visual detail would be lost, these features are not expected to significantly alter the landscape character.

Impairment of view during the construction phase. Construction on KTA would not be visible from surrounding sensitive viewing areas.

Consistency with visual resource policies. Construction and training on KTA and Drum Road would occur in areas that would not alter views from public roadways or sensitive view areas and would be substantially consistent with the visual preservation objectives stated in the Koʻolau Loa and North Shore sustainable communities plans.

Impairment of view from visible fugitive dust. As discussed in Section 7.5, training at KTA would increase fugitive dust in two ways. Fugitive dust PM<sub>10</sub> emissions from military vehicle use on unpaved roadways and off-road areas would increase. Wind erosion from areas disturbed by vehicle maneuver activity would increase. Also, Section 7.9 discusses soil erosion. Wind would create visible fugitive dust clouds similar to dust generated during agricultural plowing. Because of prevailing winds the visible dust will likely disperse within minutes. Also, the training areas are largely outside the public viewshed. It is assumed the fugitive dust and soil mitigation identified in Sections 7.5 and 7.9 would be implemented to keep soil

erosion and compaction to a minimum. As a result, visual impacts would be less than significant with respect to visible fugitive dust.

Alteration of nighttime light and glare. Under the Proposed Action, the use of nighttime lighting devices, such as flares, during training might increase slightly. The use of these devices is not expected to increase dramatically because Soldiers would train using night vision goggles. Also, any new lighting will be shielded to minimize glare. Visual impacts would be less than significant with respect to altering nighttime light and glare.

### ***Reduced Land Acquisition***

The impacts associated with the RLA are identical to those described for the Proposed Action.

### ***No Action Alternative***

#### ***Less than Significant Impacts***

The existing baseline for visual resources would continue under No Action. No other significant training, construction, or land use changes are proposed under No Action that would result in any visual resource impacts on KTA.